TEH djw

Environmental Affairs
Bin 10221
241 Ralph McGill Boulevard NE
Atlanta, Georgia 30308-3374
Tel 404.506.7063

GEORGIA POWER
A SOUTHERN COMPANY

December 7, 2007

Dr. Carol A. Couch
Director
Environmental Protection Division
Suite 1152 East
205 Butler Street, S.E.
Atlanta, Georgia 30334

RE: Plant Scherer
NPDES Permit No. GA0035564
Amendment to Renewal Application

Dear Dr. Couch:

On May 24, 2006, Georgia Power Company submitted an application to renew the Plant Scherer NPDES permit, Number GA0035564. This letter transmits documents amending that application for two purposes.

First, we are requesting an alternate outfall location for the plant Final Discharge, Outfall 01, to discharge this wastewater to Lake Juliette rather than to the Ocmulgee River. This alternate location would only be used in situations of extreme drought, as we are presently experiencing in north Georgia. The discharge would supplement natural inflow to Lake Juliette, which serves as the plant's service water pond. Due to low drought flows in the Ocmulgee River, we have been unable to utilize our Surface Water Withdrawal Permit, No 102-0590-03, to maintain reliable operating levels in Lake Juliette. Discharging the NPDES Final Discharge to Lake Juliette will prolong the water supply for the plant if rainfall continues to be insufficient to recharge the lake through natural inflow or from the river. This change will affect only the location of the Final Discharge and there will be no changes in any of the permit parameters or conditions regulating the content or volume of the discharge. The alternate location will only be used when pumping from the river is prohibited and Lake Juliette's level is lower than 425 feet. At all other times, the normal Final Discharge to the Ocmulgee River will be used.

Second, during the five year term of the renewed permit, Plant Scherer will place into operation Flue Gas Desulfurization (FGD) air emission control equipment. The FGD process will generate additional internal wastewater streams which will be consistent with the federal steam electric effluent guidelines definition for Low Volume Waste, 40 CFR 423.11(b). The FGD wastewater, identified as Outfall 03J, will flow to the Ash

Pond where it will combine with the other low volume wastewaters currently being co-treated. Outfall 03K is added for the FGD limestone stockpile and gypsum handling area storm water runoff to discharge to the Coal Pile Runoff Pond. Outfall 15 is an emergency overflow from the gypsum storage area, which will be designed to allow a discharge to Berry Creek only in the event of rainfall exceeding a 100-year 24-hour storm event, during which Berry Creek would also experience high flow rates.

Enclosed are documents to amend that application, including revised Form 2C, NPDES flow diagram, outfall location topographical map.

If you need additional information or have questions regarding this matter, please contact Bill Evans at 404-506-7031.

Sincerely,

Charles H. Huling

WRE/
Attachments

xc: Dominic Weatherill, Unit Coordinator, Industrial Wastewater Unit

Please print or type in the unshaded areas only.

EPA I.D. (*copy from Item 1 of Form 1*)
GAD000612796

Form Approved.
OMB No. 2040-0086
Approval expires 7-31-88

FORM 2C NPDES

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY
APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER
EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURAL OPERATIONS
Consolidated Permits Program

I. OUTFALL LOCATION

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. OUTFALL NO. (*list*)	B. LATITUDE			C. LONGITUDE			D. RECEIVING WATER (*name*)
	1. DEG.	2. MIN.	3. SEC.	1. DEG.	2. MIN.	3. SEC.	
01	33	05	06	- 83	46	44	Ocmulgee River via pipeline
01 alternate	33	03	32	- 83	48	41	Lake Juliette - alternate discharge location only during drought plan implementation
02	33	04	18	- 83	47	45	Berry Creek
04,05,06, 07,08,09, 10,12,13, 14	33	03	14	- 83	48	26	Lake Juliette - Service Water Storage Lake
11	33	02	51	- 83	44	21	Ocmulgee River
15	33	04	36	-83	47	32	Berry Creek

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

B. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.

1. OUTFALL NO. (*list*)	2. OPERATION (S) CONTRIBUTING FLOW		3. TREATMENT		
	a. OPERATION (*list*)	b. AVERAGE FLOW (*include units*)	a. DESCRIPTION	b. LIST CODES FROM TABLE 2C-1	
01	Final Plant Discharge Stormwater	14,052 gpm	25,000 gpm (maximum)	2F **	4A
01A	Cooling Tower Blowdown Units 1-4	7,470 gpm	33,000 gpm (maximum)	2F **	4A
01B	Ash Transport Bleedoff	6,582 gpm	19,753 gpm (maximum)		4A
01C	Unit 3 Cooling Tower Overflow and Basin Drain	*	15,820 gpm (maximum)	2F **	4A
01D	Unit 4 Cooling Tower Overflow and Basin Drain	*	15,820 gpm (maximum)	2F **	4A
01E	NPDES Basin Minimum Flow	*	2,238 gpm (maximum)	2F **	4A
02	Detention Pond (I-pond) Stormwater	451 gpm	22,266 gpm (10 yr - 24 hr rainfall event)		4A
02A	Detention Pond Bottom Drain	*			4A
02B	Fire Training Runoff	*			4A
02C	NPDES Basin Emergency Overflow Stormwater	*		2F **	4A
	* Intermittent or emergency Discharge				
	** During periods of Chlorination				

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FORM 2C NPDES

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY
APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER
EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURAL OPERATIONS
Consolidated Permits Program

I. OUTFALL LOCATION

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. OUTFALL NO. (*list*)	B. LATITUDE			C. LONGITUDE			D. RECEIVING WATER (*name*)
	1. DEG.	2. MIN.	3. SEC.	1. DEG.	2. MIN.	3. SEC.	

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

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B. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.

1. OUTFALL NO. (*list*)	2. OPERATION (S) CONTRIBUTING FLOW		3. TREATMENT		
	a. OPERATION (*list*)	b. AVERAGE FLOW (*include units*)	a. DESCRIPTION	b. LIST CODES FROM TABLE 2C-1	
03	Ash Transport Water Stormwater	32,381 gpm	50,000 gpm (maximum)	4C	4A
03A	No. 2 Sewage Treatment Plant	12 gpm	120 gpm (maximum)	3A, 2F	4C, 4A
03B	No. 4 Sewage Treatment Plant	1 gpm	17 gpm (maximum)	3A, 2F	4C, 4A
03C	No. 1 Sewage Treatment Plant	0 gpm	30 gpm (maximum)	3A,, 2F	4C, 4A
03D	Coal Pile Runoff Basin	693 gpm	5,300 gpm (maximum)	4C	4A
03E	Wastewater Basins - Units 1-4	12,000 gpm	15,000 gpm (maximum)	4C	4A
03F	Low Volume Wastes - Units 1-4	5,388 gpm	8,600 gpm (maximum)	4C	4A
03G	Tractor Garage	1 gpm	500 gpm (maximum)	4C	4A
03H	Coal Pile Runoff	260 gpm	12,800 gpm (maximum)	4C	4A
03I	Chemical Cleaning Wastes	*		2K, 2C	4C, 4A
03J	Flue Gas Desulfurization Wastes	3,000 gpm	4,000 gpm	4C	4A
03K	FGD limestone & gypsum runoff	*	*	4C	4A
04	Service Water Final Discharge	1,527 gpm	79,200 gpm (maximum)	2F **	4A
04A	Service Water Return	*	79,200 gpm (maximum)	2F **	4A
04B	Service Water Minimum Flow	1,527 gpm	66,000 gpm (maximum)	2F **	4A
05	Unit 1 Cooling Tower Overflow and Basin Drain	*	15,820 gpm (maximum)	2F **	4A
06	Unit 2 Cooling Tower Overflow and Basin Drain	*	15,820 gpm (maximum)	2F **	4A

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FORM 2C NPDES

U.S. ENVIRONMENTAL PROTECTION AGENCY
APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER
EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURAL OPERATIONS
Consolidated Permits Program

I. OUTFALL LOCATION

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. OUTFALL NO. (*list*)	B. LATITUDE			C. LONGITUDE			D. RECEIVING WATER (*name*)
	1. DEG.	2. MIN.	3. SEC.	1. DEG.	2. MIN.	3. SEC.	

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

B. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.

1. OUTFALL NO. (*list*)	2. OPERATION (S) CONTRIBUTING FLOW		3. TREATMENT		
	a. OPERATION (*list*)	b. AVERAGE FLOW (*include units*)	a. DESCRIPTION	b. LIST CODES FROM TABLE 2C-1	
07	Settling Pond Emergency Overflow Stormwater	*	57,000 gpm (maximum)	1U, 2K	4A
08	Employee Car Wash Stormwater	7 gpm	325 gpm (maximum)		4A
09	Service Water Pump Seal Water	65 gpm	78 gpm (maximum)		4A
10	Service Water Screen Backwash	510 gpm	765 gpm (maximum)		4A
11	River Intake Pump Seal Water	100 gpm	100 gpm (maximum)		4A
12	Condensate, Filtered Water, and Potable Water Tank Overflows Stormwater	*	2,536 gpm (maximum)	2F**	4A
13	Units 1-2 Wastewater Basin Emergency Overflow	*	4,300 gpm (maximum)		4A
14	Units 3-4 Wastewater Basin Emergency Overflow	*	4,300 gpm (maximum)		4A
15	Gypsum Stack Emergency Overflow	*	*		4A

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C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items 11-A or B intermittent or seasonal?

☒ YES (complete the following table) ☐ NO (go to Section III)

1. OUTFALL NUMBER (list)	2. OPERATION(s) CONTRIBUTING FLOW (list)	3. FREQUENCY		4. FLOW				
		a. DAYS PER WEEK (specify average)	b. MONTHS PER YEAR (specify average)	a. FLOW RATE (in mgd)		b. TOTAL VOLUME (specify with units)		c. DURATION (in days)
				1. LONG TERM AVERAGE	2. MAXIMUM DAILY	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	
	See attachment 1 for intermittent discharges							

Analyses on overflows and emergency discharges are submitted with the quarterly Operation Monitoring Reports

III. PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?

☒ YES (complete Item III-B) ☐ NO (go to Section IV)

B. Are the limitations in the applicable effluent guideline expressed in terms of production (or other measure of operation)?

☐ YES (complete Item III-C) ☒ NO (go to Section IV)

C. If you answered "yes" to Item III-B, list the quantity which represents an actual measurement of your level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

1. AVERAGE DAILY PRODUCTION			2. AFFECTED OUTFALLS
a. QUANTITY PER DAY	b. UNITS OF MEASURE	c. OPERATION, PRODUCT, MATERIAL, ETC. (specify)	(list outfall numbers)

IV. IMPROVEMENTS

A. Are you now required by any Federal, state or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

☐ YES (complete the following table) ☒ NO (go to Item IV-B)

1. IDENTIFICATION OF CONDITION, AGREEMENT, ETC.	2. AFFECTED OUTFALLS		3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE	
	a. NO.	b. SOURCE OF DISCHARGE		a. REQUIRED	b. PROJECTED

B. OPTIONAL. You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction.

☐ MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAM IS ATTACHED

CONTINUE ON PAGE 3

EPA I.D. NUMBER *(copy from Item 1 of Form 1)*

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V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding - Complete one set of tables for each outfall - Annotate the outfall number in the space provided. NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered V-1 through V-9.

D. Use the space below to list any of the pollutants listed in Table 2c-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE
None			

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

Is any pollutant listed in Item V-C a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

☐ YES (list all such pollutants below) ☒ NO (go to Item VI-B)

 CONTINUE ON PAGE 4

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VII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ YES (identify the test(s) and describe their purposes below) ☒ NO (go to Section VIII)

VIII CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item V performed by a contact laboratory or consulting firm?

☒ YES (list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below) ☐ NO (go to Section IX)

A. NAME	B. ADDRESS	C. TELEPHONE *(area code & no.)*	D. POLLUTANTS ANALYZED *(list)*
Analytical Services Inc.	110 Technology Parkway Norcross, Georgia 30092	770-734-4200	All except pH, temperature, and Total Residual Chlorine.

IX. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designated to assure that qualified personal properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. NAME & OFFICIAL TITLE (type or print)	B. PHONE NO. (Area code & no.)
Charles H. Huling, Vice President, Environmental Affairs	(404) 506-7716
C. SIGNATURE Charles H. Huling	D. DATE SIGNED December 7, 2007

INTERMITTENT FLOW DESCRIPTIONS
Attachment 1 for Form 2C page 2

Outfalls 01C, 01D, 05, and 06 – Cooling Tower Overflow / Basin Drain

Overflows from cooling towers may occur infrequently during equipment malfunction or emergency conditions. The estimated overflow discharge (15,820 gpm) is the design make-up water flow. Draining of the cooling tower basins may occur during unit outages. The frequency is dependent on unit operation and is estimated at twice per year.

Outfall 01E - NPDES Basin Minimum Flow

NPDES system minimum flows typically occur during periods of unit outages or cooling tower biocide treatment due to reduced cooling tower blow-down. The effluent is service water with a maximum discharge of 2,238 gpm.

Outfall 02A - I-Pond Bottom Drain

Discharges from the Detention (I-Pond) through the bottom drain could occur if necessary to perform dike, dam, or pond maintenance.

Outfall 02B - Fire Training Runoff

Discharges of filtered water used for fire training purposes may occur during the year due to classes conducted on site.

Outfall 02C - NPDES Basin Emergency Overflow

The normal discharge for the NPDES basin is through outfall 01. In the event of equipment malfunctions or emergency conditions, the basin may discharge though this outfall. Past events have been infrequent and of short duration.

Outfall 03I - Chemical Cleaning Wastes

Boiler and Turbine cleaning wastes are usually treated with sodium hydroxide or lime to a pH sufficient to precipitate the iron and copper suspended in solution. The water is then pumped to the ash pond via the wastewater basin. Boiler cleaning is infrequent and turbine cleaning is anticipated to be performed once per year. Rainwater is also pumped out of the chemical cleaning basin into the Units 1 & 2 wastewater basin.

Outfall 03K – FGD Limestone and Gypsum Handling Area Runoff

Discharges from storm water runoff from the limestone stockpile and gypsum handling area will depend on frequency and volume of rainfall events. These will flow to the Coal Pile Runoff Pond which is pumped to the Ash Pond.

Outfall 07 - Settling Pond Emergency Overflow

The normal settling pond discharge is through the ash transport bleed-off system. Discharges from the emergency overflow should only occur during periods of equipment malfunction, heavy rainfall, or emergency conditions. Overflow volume is variable with an estimated maximum of 57,000 gpm.

Outfall 12 - Condensate/Filtered Water/Potable Water Tank Overflows to Lake Juliette (Service Water Pond)

Storage tanks could overflow during abnormal operations. These infrequent overflows would consist of condensate, demineralized water, filtered water, or potable water. An overflow is typically less than 100 gpm and short in duration.

Outfall 13 and 14 - Waste Water Basin Emergency Overflow

Discharges could occur from equipment malfunctions or emergency conditions. An emergency portable pump is in standby mode to reduce the likelihood of an overflow.

Outfall 15 – Gypsum Stack Emergency Overflow

The normal gypsum stock pile storm water runoff will be directed along with the other Low Volume Wastewater from the Flue Gas Desulfurization process to the Ash Pond. Discharges from the emergency overflow will occur only following rainfall that exceeds a 100-year, 24-hour storm event. During such a storm event, the receiving stream, Berry Creek, would also experience abnormally high flows.

PLANT SCHERER
LAKE JULIETTE DROUGHT CONTINGENCY PLAN

NPDES Permit # GA0035564
Surface Water Permit # 102-0590-03

During the extreme drought of 2007-8, the volume of Plant Scherer's service water storage pond, Lake Juliette, dropped dangerously low due to restrictions in the plant's surface water withdrawal permit that prohibited pumping from the Ocmulgee River during low river flows. EPD approved drought contingency measures that allow the movement of stored water in Lake Jackson to Lake Juliette without reducing Ocmulgee River flows downstream of Plant Scherer. These measures provide for continuous operation of a single river pump, at a withdrawal rate of approximately 90cfs, from Ocmulgee River provided the following conditions are met:

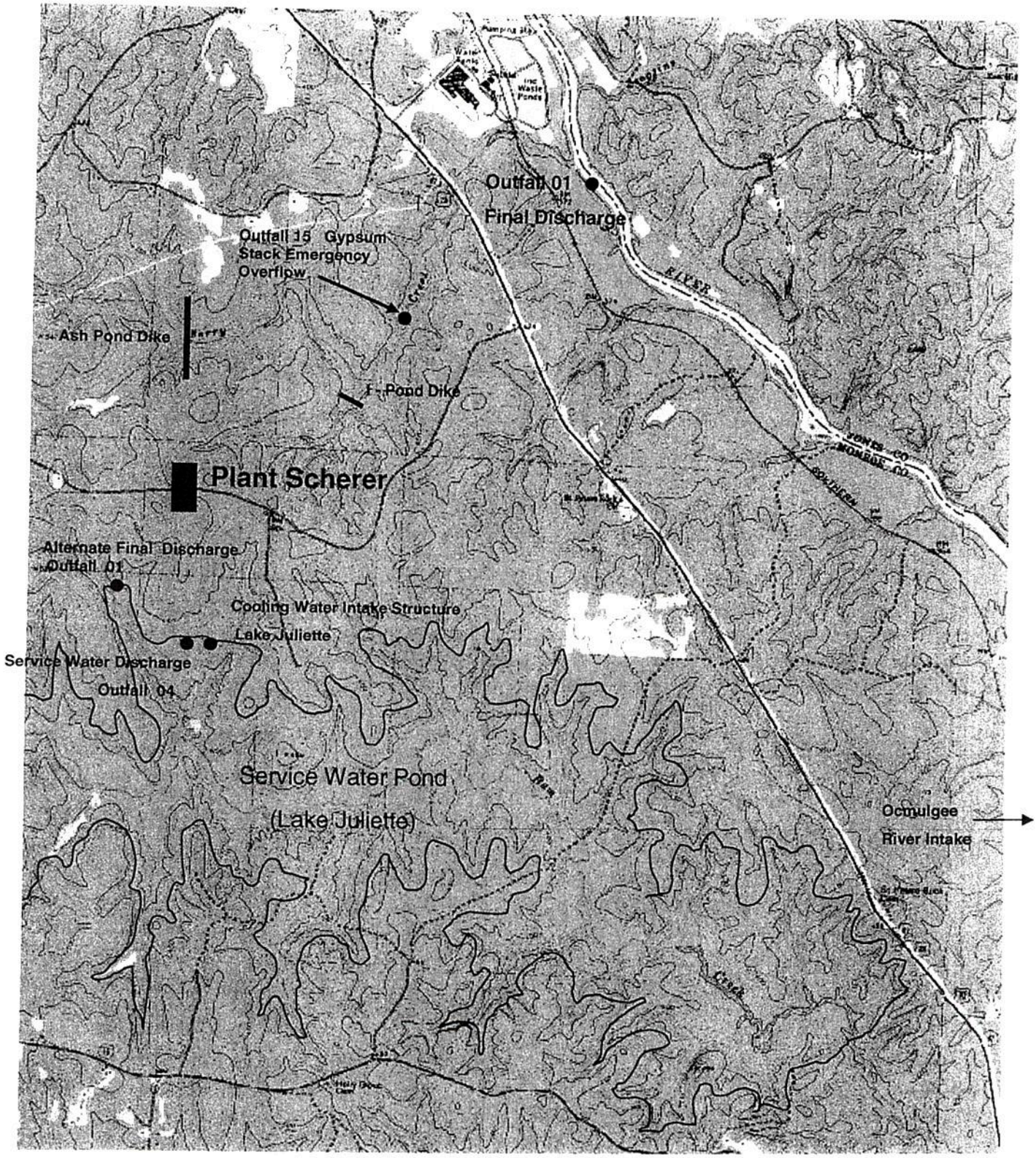
- River flow is less than 1020cfs but greater than or equal to 405 cfs as measured at USGS Gage 02210500, Ocmulgee River near Jackson, Ga.
- The pumping operation commences only when Lake Juliette level drops below 420'.
- The river pumping may continue until Lake Juliette rises above elevation 425',
- If river flow is greater than or equal to 1,020 cfs, the existing permit conditions apply

Supplementary to the above surface water withdrawal permit provision, the NPDES permit will allow an alternate outfall location for the Final Discharge, Outfall 01, only to be used during extreme drought conditions as described below. This will reduce the rate of consumption from Lake Juliette by returning the wastewater from the plant to the Lake rather than to the Ocmulgee River. Permit conditions and effluent limitations will not change with this change in physical location of the Outfall.

The Alternate Outfall 01 location to Lake Juliette will be employed only under the following conditions:

- Special Condition in the surface water withdrawal permit is imposed, restricting pumping from the Ocmulgee River
- Lake Juliette level falls below elevation 425'
- The Alternate Outfall 01 will cease discharging and revert to the normal Outfall 01 location when Ocmulgee River flows are above 1,020 cfs, sufficient to provide normal pumping operations.

Plant Scherer



USGS 7.5 Minute East Juliette Quadrangle